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FIVE DECADES OF REMEDIAL READING.

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A HISTORICAL OVERVIEW OF 50 YEARS OF REMEDIAL READING IS CATEGORIZED AND DISCUSSED. THE DECADE DIVISIONS ARE 1916-25, 1926-35, 1936-45, 1946-55, AND 1956-65. THE FIRST DECADE WAS CHARACTERIZED BY JOURNAL ARTICLES AND THE PUBLICATION OF SEVERAL BOOKS. DURING THE SECOND DECADE BATTERIES OF TESTS WERE STANDARDIZED FOR DIAGNOSING READING DIFFICULTIES. IT WAS AT THIS TIME THAT READING CLINICS WERE FOUNDED. IN THE THIRD DECADE, THE INTERNATIONAL READING ASSOCIATION CAME INTO EXISTENCE, THE ORTON SOCIETY WAS FOUNDED, AND COLLEGES BEGAN TO ORGANIZE READING CLINICS. DURING THE DECADE 1956-65, THERE WAS A SHIFT IN THEORY FROM PSYCHODYNAMICS TOWARD PHYSIOLOGICAL, NEUROLOGICAL, AND CONSTITUTIONAL FACTORS. A 62-ITEM BIBLIOGRAPHY IS INCLUDED. THIS PAPER WAS PRESENTED AT THE INTERNATIONAL READING ASSOCIATION CONFERENCE (SEATTLE, MAY 3-6, 1967). (BK)

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FIVE DECADES OF REMEDIAL READING

by

Albert J. Harris

An Invitational Address providing an historical overview of the development of remedial reading in America between 1916 and 1965.

International Reading Association Annual Conference
Seattle, Washington, May 5, 1967

Five Decades of Remedial Reading

Albert J. Harris

The year 1965 marked the close of the first fifty years of American interest in remedial reading. When I was invited to choose a topic, it occurred to me that an historical overview of the 50-year period might be appropriate. As I read again some of the contributions that were written over 30 years ago, I rediscovered many an idea that had been new and exciting when I had first encountered it. I developed a new respect for the pioneers, and a conviction that much of our present thinking has roots that go far back. It began to appear that each of the five decades had its own distinctive characteristics.

Since this is an attempt to provide an historical overview and perspective, the five decades will be discussed in sequence. For each ten-year period major trends will be noted and the particular developments that seem to me most noteworthy will be briefly described. Obviously, the selection of what to include from a vast and nearly overwhelming literature is a matter of personal opinion, and while I have tried to be objective, my own beliefs and interests necessarily have influenced my choices and what I shall say about them.

The First Decade: 1916 to 1925

The idea that some children have special difficulty in learning to read and can be diagnosed and given special teaching seems to have sprung into prominence in American education almost full grown. With the first journal article on the subject dated 1916, by 1922 there already were two books and a body of periodical literature on the subject.

Concern with reading disability did not originate on this continent. A case study written in 1896 by a British physician, W. Pringle Morgan, is generally thought to be the first writing on the subject (41). Morgan used the term "congenital word-blindness" to describe a fourteen-year-old boy who had not learned to read although he seemed intelligent in other respects. But for the next twenty years interest was confined almost entirely to a few European medical practitioners, and did not cross the Atlantic.

The first American paper on remedial reading was probably one written by Willis Uhl and published in the Elementary School Journal in 1916 (59). Uhl gave silent and oral reading tests to all pupils in grades 3 to 8 of an elementary school, listed 10 kinds of faults, and suggested remedial procedures.

Within the next four years diagnostic procedures, case studies, and school survey results were published by such people as Augusta Bronner (5), Charles Judd (31), W. S. Gray (25), Clarence T. Gray (34), and Laura Zirbes (62). By 1921 William S. Gray authored a book of case studies (26), and in 1922 Clarence T. Gray attempted to cover the field in a book entitled Deficiencies in Reading Ability: Their Diagnosis and Remedies (24).

The first American paper in the European mode was by Clara Schmitt and appeared in 1918 (50). She used the terms "developmental alexia" and "congenital word-blindness" and advocated a systematic phonic method of remedial instruction. She introduced one new sound at a time in a continued story in which bells rang (l), dogs barked (r), cows mooed (m), etc.

At the same time Grace Fernald, who had worked under Dr. Shepherd Ivory Franz in the retraining of soldiers with head wounds, was developing the kinesthetic method for teaching non-readers. Her first paper, published in 1921, was widely read and influential (18).

The first decade drew to a close with the publication of the Report of the National Committee on Reading in 1925--the famous 24th Yearbook of the National Society for the Study of Education (46). In this highly influential volume there was a chapter entitled, "Diagnosis and Remedial Work." That chapter consisted mainly of a table with three parallel columns: evidences of deficiency; diagnosis; remedial suggestions. The table occupied ten pages and contained suggestions that are still worth reading.

There is an interesting contrast in the basic approach of the early medical and educational writers on reading problems; one which I believe continues to this day. The physicians were concerned primarily with differential diagnosis and only secondarily with remedial help. The educators were concerned mainly with developing tests to measure reading skills and with practical teaching techniques, and were interested in diagnosis--and especially the kind of diagnosis that tries to establish causation--to a far lesser degree. This difference is still quite evident in the 1960's.

The Second Decade: 1926-1935

The later 1920's saw the development of many new ideas. Most important, probably, was the development of batteries of tests for use in diagnosing reading difficulties. First to appear were the Gates Reading Diagnosis Tests, in 1927 (21). Monroe's Diagnostic Reading Examination was published in 1928 (39),

and the Durrell Analysis of Reading Difficulty was first copyrighted in 1933. These three batteries are still used widely in reading clinics, two of them in revised editions.

Among the research studies of the decade, perhaps the most valuable was Monroe's Children Who Cannot Read (38). This book summarized previous research, reported on a detailed study of hundreds of severe reading disability cases, and described in detail a teaching method emphasizing phonics with a good deal of kinesthetic reinforcement. It ranks, in my opinion, among the best researches on reading disability. Other important research contributions were made by Gates and his doctoral students, one of whom was Guy L. Bond. These studies systematically studied visual, auditory, readiness, and lateral dominance factors in relation to reading problems.

Samuel T. Orton, a neurologist, published his first paper on reading problems in 1925 (43). The development of his ideas has recently been summarized usefully by Mrs. Orton (42), who was instrumental in founding the Orton Society in his memory. Orton's theoretical formulation is based on rivalry between two cerebral hemispheres, neither of which has established a clear dominance over the other; as dominance shifts, the child shows a fluctuating reversal tendency. Orton's followers have generally favored a synthetic phonic or sounding-blending method of teaching.

At about the same time, Walter F. Dearborn of Harvard was reporting a high incidence of mixed dominance and left-handedness in cases of reading disability (11). He explained their reversals in terms of conflicting motor tendencies, a theory that was for many years the main alternative to Orton's ideas. Dearborn also studied aniseikonia, a condition in which the two eyes form images of unequal size, and found that children with this condition were handicapped in reading (12). My own first introduction to reading problems came about through Dearborn's assistant, who in 1929 let me take all of the tests they were using and explained their research methodology to me.

By the early 1930's there was enough published on reading problems to make summaries very useful. Integrative summaries of research on remedial reading were published by Miles A. Tinker in the 1930's (56, 57).

Still another feature of the second decade was the founding of the first reading clinics. Among the earliest were those founded [redacted] at Boston University by Durrell, and at Shaker Heights, Ohio, by Betts.

Aside from Monroe's monograph, referred to earlier, the most influential book on remedial reading of the second decade was Gates' The Improvement of Reading, first published in 1927 and revised in 1935 (22). Although Gates concentrated mainly on his own tests and teaching materials, his was the best textbook on remedial reading for many years.

The Third Decade:- 1936-1945

The period from 1935 to the beginning of World War II was marked by a continued output of new books. First to appear were Betts' Prevention and Correction of Reading Difficulties (2), and the first book on remedial reading in secondary schools, by McCallister (35), both of which were published in 1936. The next year came Remedial Reading by Monroe and Backus (40), and Prediction and Prevention of Reading Difficulties by Stanger and Donohue, two followers of Orton (54). In 1938 Luella Cole's The Improvement of Reading called for multilevel boxed materials for individualized practice and predicted the coming of reading laboratories which arrived commercially about 20 years later (9). Russell, Karp and Kelly issued a compendium of useful reading exercises and games in the same year (49). In 1940 two textbooks appeared, How to Increase Reading Ability by Harris (28), and Durrell's Improvement of Basic Reading Abilities (16). During the early 1940's, the years of World War II, the only other important new book was Fernald's definitive description of her kinesthetic method (17).

The mid- and late-1930's also saw the development of the first large-scale remedial program in a public school system. The presence of many hundreds of unemployed college graduates led to some bold ventures in finding useful things for them to do while receiving federal aid. Under the supervision of some of Gates' assistants, the Federal Writer's Project prepared a series of 80 practice booklets for use in remedial reading. Several hundred people with no previous teaching experience were put through a short training program and then were assigned to teach small groups of retarded readers in the public schools of New York City. Most of my earliest students in remedial reading courses were involved as teachers or supervisors in that remedial program, which lasted for several years until our entry into World War II caused the program to be discontinued.

The accelerating pace of research and writing on all aspects of reading instruction during the 1930's produced an appreciative welcome for Traxler's Ten Years of Research in Reading, which appeared in 1941 (58). In this summary

and annotated bibliography more than 100 articles on remedial reading and 18 articles on diagnosis were listed and briefly summarized, in addition to references on many other topics. Traxler was encouraged to prepare three later volumes of the same kind, each covering a period of several years (58). These have been extremely valuable to scholars and research workers in reading.

During this decade the mental hygiene movement discovered reading disability, and case studies, theoretical discussions, and research reports began to appear in such journals as Mental Hygiene, American Journal of Orthopsychiatry, and the International Journal of Psychoanalysis. Blanchard's case studies of children with reading problems of apparently emotional origin attracted wide attention (3). In 1941, Gates estimated that among children with marked reading disabilities about 75 per cent show personality maladjustment, and that in only about 25 per cent is the emotional difficulty a contributing cause of the reading failure. He was widely quoted in educational circles (23). Child guidance specialists, however, regarded his figures as marked underestimates. While in educational situations remedial teaching was the preferred treatment, child guidance clinics often gave priority to psychotherapy for child and parent.

This decade also saw the development of what may be called the machine approach to remedial reading. For diagnosis, the major development was the production of a commercially manufactured eye-movement camera called the Ophthalm-O-Graph, designed by Earl A. Taylor; previously such cameras had to be individually designed and custom built. Taylor's 1937 book provided new information on the use of eye-movement photography in diagnosis (55).

On the remedial side, there were three main machine developments. One was the first reading pacer, designed by Guy T. Buswell (6). It contained a motor-driven shutter that would come down over a page of print at a rate that could be controlled. A second was the first set of motion picture films for reading practice at controlled speeds, developed at Harvard for use with college students. A third was Earl Taylor's Metron-O-Scope (55). This was a large and cumbersome device which had three shutters and could expose a line of print one-third at a time at a controlled rate. All of these appeared between 1935 and 1940. Improved devices to accomplish the same purposes are currently in wide use, particularly in college and adult reading programs.

In 1940 I summarized the results of the research then available on the effectiveness of improving reading by attempting to train eye movements, or by controlling the exposure of reading material, as follows: "Experimental evidence indicates

that motivated practice produces as much improvement in rate of reading as programs of eye-movement training do, while it has a somewhat more favorable effect on comprehension. Another point of practical importance is the fact that motivated practice requires no special material while eye-movement drills require the use of specially prepared material or expensive apparatus. There is no reason for the teacher who relies on motivated practice to feel that his method is inferior to the formal methods of training eye movements or the use of complex machines to pace the reader" (28). Now, 27 years later, I have found no reason to change that opinion.

America's entry into World War II caused a depletion of the graduate schools, and during the war and for a couple of years after it, little that was new about remedial reading appeared in print.

The Fourth Decade: 1946-1955

Of the research studies that appeared during the ten years that followed World War II, the one that had the greatest influence in America was Helen Robinson's Why Pupils Fail in Reading, published in 1947 (47). The first part of the book contained a scholarly review of the literature on the causation of reading disability. The rest of it was a detailed report of the intensive study of 22 cases, by a staff representing 10 different professional specialties. Robinson stressed the absence of any one causal factor present in all cases. In these children many anomalies were present that were not considered to have causal importance for the reading problem, as well as many that were. For example, while 73 per cent of the cases had visual problems, the visual problem was considered causally significant in only 50 per cent. Social, visual, and emotional problems appeared most frequently. Inappropriate teaching methods, neurological difficulties, and speech or functional auditory difficulties seemed less frequently to be causal. Endocrine disturbances, general physical difficulties, and insufficient auditory acuity appeared to be least important. Robinson's book provided strong support for a pluralistic view of the causation of reading disabilities.

The major European research study of the decade was Hallgren's monograph on the inheritance of specific dyslexia, which was published in 1950 (27). Hallgren's study of 79 clinic cases and 43 other "word blind" cases included family histories. He reported some evidence of reading disability among the parents or siblings in all but 13 cases, and concluded that a primary reading disability is inherited as a unitary Mendelian dominant characteristic. He also accepted the idea that there are other reading disabilities caused by such factors as emotional disorders

or environmental conditions.

Hallgren's monograph is widely cited by recent writers on dyslexia, such as Hermann in Denmark (30), and Critchley in England (10), as providing evidence of a special kind of "pure" reading disability. I am inclined to agree with M. D. Vernon, who commented: "What seems much more plausible is that there is a congenital disposition in certain cases towards the occurrence of certain related defects: reading disability, speech defects or infantile speech; motor incoordination; left-handedness or ambidextrality" (61).

In the textbook field, 1947 saw the publication of Kottmeyer's Handbook of Remedial Reading (33), as well as revised editions by Gates and Harris.

This decade saw the birth of the two organizations which later merged to become the International Reading Association. The National Association for Remedial Teaching, known as NART, was started in New England by a group among whom Elva E. Knight was prominent, and shortly attracted to its board of directors many of the leading authorities on reading problems. The International Council for the Improvement of Reading Instruction (I.C.I.R.I.) was started around 1947 by graduate students at Temple University. Following the naming of its publication as The Reading Teacher in 1951, and its issuance as a printed magazine in 1952, I.C.I.R.I. grew steadily. By 1954 the majority of the people on the board of one of these organizations were also on the board of the other, and the desirability of a merger was evident. The last day of their independent existence was December 31, 1955, a fitting close to the decade.

The Orton Society was also founded during this decade, and issued its first bulletin in 1950.

The preference of many psychiatrists and clinical psychologists for emphasis on emotional causation, and treatment of reading problems by psychotherapy, continued strongly through these ten years. One of the most influential papers was by Gerald Pearson, a highly regarded psychoanalyst, and described several kinds of personality deviations that could produce reading disability as a symptom (44). I can recall being a member of a symposium on ego problems in reading difficulties at the annual convention of the American Orthopsychiatric Association in 1953; I described remedial reading as a form of non-interpretive, ego-strengthening psychotherapy. Numerous theses were done about that time in which personality tests were given to a reading disability group and a group of normal readers. Nearly all of those studies found a wide range of scores in both groups, and no significant differences in group averages. By the end of the decade the suspicion was

growing that the psychology of personality was not providing the key to the understanding of reading disability.

This decade from 1946 to 1955 was also marked by a general expansion of interest in remedial reading, which was shown in many ways. Scores of colleges and universities organized reading clinics, and many started graduate training programs for reading specialists. The number of remedial teachers in public school systems continued to grow. Remedial reading programs began to spread upward from elementary schools to the secondary schools. Commercial organizations offering everything from tutoring the non-reader to speed reading for executives sprang up in the larger cities.

With a growing market, materials written specifically for use in remedial reading began to appear, and several writers compiled lists of books that combined a mature interest level with low difficulty.

As this decade ended, in 1955, a new theory burst upon the public: children were failing to learn to read just because they weren't being taught phonics. Rudolf Flesch's Why Johnny Can't Read (19) became a best seller and public and parental criticism of the schools quickly intensified. Looking back, it is easy to see both that the argument was a gross oversimplification, put across with blatant use of propaganda techniques, and that it had a partial basis in fact. The merger resulting in the birth of I.R.A. came just when public interest in reading was reaching a peak of intensity. So closed a most interesting decade.

The Fifth Decade: 1956-1965

The year 1956 opened the fifth decade on a level of high emotional tension. Reading specialists were busy showing that disabilities existed in countries where the grapheme-phoneme relationship was regular and phonic instruction was the rule, and informing the public about all the factors that may help to produce a reading difficulty other than method of teaching. Flesch had, however, done remedial reading a great service: he had convinced hundreds of thousands of parents that when Johnny had trouble with reading he was not necessarily stupid, and this led to public pressure both for improved developmental reading programs and for more diagnostic and remedial facilities.

On January 1, 1956, I.R.A. officially came into existence, and its phenomenal growth since then has been a source of continuing amazement to me, as well as of satisfaction. Before and shortly after the merger some remedial specialists expressed fears that their interests would be neglected in the new organization. By now, I hope, such fears are things of the past.

New books continued to appear. New textbooks included one by Bond and Tinker in 1957 (4), and one by Roswell and Natchez in 1964 (48). Revised editions were brought out by Harris in 1956 and 1961, and by Kottmeyer in 1959. The 1962 University of Chicago Reading Conference was devoted to underachievement in reading (60). Scholarly contributions included Vernon's review of the literature on backwardness in reading (61), Malmquist's study of reading disability in the first grade (36), the books by Hermann and Critchley mentioned previously, and a useful collection of papers edited by Money (37). Although papers on diagnostic and remedial reading continued to appear in scores of educational, psychological, and medical journals, the various I.R.A. publications became increasingly helpful. Annual reviews of reading research by Helen M. Robinson for I.R.A.* and Theodore Harris for the Journal of Education Research continued the pioneer efforts of Gray and helped to keep reading specialists in touch with new developments.

The major shift in theory was away from psychodynamics and toward renewed emphasis on physiological, neurological, and constitutional factors. In 1956 Rabinovitch first published his distinction between primary reading disabilities, which he considered to be the result of constitutional deviations in neurological functioning, and secondary reading disabilities which may be induced by a variety of environmental factors (45). The next year Lauretta Bender attributed severe reading disability to a maturational lag, a delayed development of certain brain centers (1). Rabinovitch and Bender were both psychiatrists with excellent reputations and their papers were influential. Both avoided the trap of attributing deficiencies in perceptual or motor skills necessarily to brain damage, a diagnosis made all too often on flimsy evidence.

In 1959 a brave effort was made to explain all reading disabilities with a single theory. Smith and Carrigan, after an intensive study of about 40 cases, concluded that all of the varied symptoms could be explained by a lack of balance between two chemicals controlling the transmission of nerve impulses in the brain (52). The theory was impressive; the evidence, unfortunately, was less than convincing.

Another unconventional approach was that of Delacato, whose background was in work with brain-damaged children. Delacato attributed reading disability to an arrest of neurological development (14). Some children were thought to be arrested at a level of one of the lower brain centers; their treatment might start with practice in creeping, crawling, and sleeping in a preferred position. For other

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*In The Reading Teacher through 1964, and in the Reading Research Quarterly from 1965 on.

children the problem was thought to be failure to establish unilateral dominance, and unconventional measures to enforce unilateral dominance included such practices as forbidding the child to listen to music. Delacato's theories have been widely discussed, but most specialists on reading disability remain skeptical.

At I.R.A. pre-conference institutes efforts were made by Harris in 1961 (29), and deHirsch in 1962 (13), to clarify the nature of the perceptual difficulties in reading cases. Both stressed the Gestalt aspects of perception, particularly with regard to part-whole relationships and failures in integration of one experience with another.

Experimentation with drugs as an adjunct to remedial treatment was started but did not get very far. Smith and Carrigan were encouraged by their results with a few cases; Staiger, on the other hand, obtained negative results (53). Considering the variety of drugs now used in psychiatric settings, this area of reading research has barely been started.

New trends in diagnostic testing included growing skepticism about intelligence tests, a new and warmly greeted test based on psycholinguistic principles, and considerable attention to testing of perceptual abilities. While reading clinics continued to rely on the Stanford-Binet and Wechsler intelligence scales which are individually administered, there was growing recognition that group tests of mental ability are not very satisfactory with retarded readers. The Illinois Test of Psycholinguistic Abilities measured nine aspects of visual, auditory, and motor functioning relevant to language development, and was welcomed in many reading clinics (32). The Frostig Developmental Test of Visual Perception attempted to provide measures of five aspects of visual perception: eye-hand coordination, figure-ground, form constancy, position in space, and spatial relations (20). Auditory perception tests were found useful, and favorable validity data were reported for the Wepman Auditory Discrimination Test (8), and an auditory blending test devised by Roswell and Chall (7).

The outpouring of new ideas about how the teaching of beginning reading can be improved that has taken place since 1960 has had its counterpart in remedial teaching. Advocates of perceptual training, i/t/a, words in color, materials based on linguistic principles, programed materials, programed tutoring, talking typewriters, and specific phonic systems have all been clamoring for attention. Most of these approaches are still too new to be properly evaluated and we will have to wait a few years for the dust to settle.

The 1960's have also seen an outburst of interest in the massive reading

retardation among disadvantaged children, particularly those belonging to minority groups. So far most of this attention has been focused on improving the developmental reading program, providing preschool enrichment, and working with the school dropout and adult illiterate. We need to take a careful look at the child who is both disadvantaged and a case of special disability.

Remedial reading began during this decade to be accepted as a field of special education, requiring specially trained teachers and deserving financial support. The first state certification of remedial teachers was begun, although most states still do not certify remedial teachers as such.

The climax of the decade, however, came with the passing of the new education acts of 1965. The Elementary and Secondary Education Act provided hundreds of millions of dollars for new programs to meet the needs of the disadvantaged. Much of this money under Title I and Title III has gone into an almost infinite variety of remedial reading projects and programs. One of the immediate results was that the previously inadequate supply of trained reading specialists was totally insufficient to meet the demand, and hundreds of untrained or insufficiently trained people have had to fill a great many of the new positions. How seriously this may have affected the quality of the new programs is still a matter of guesswork.

In 1965, also, federal recognition of the critical need for reading personnel was shown by the addition of reading to the fields of study in which special training institutes could be supported under the National Defense Education Act. The December, 1965 issue of The Reading Teacher listed 67 NDEA institutes in reading to be held in 1966. This institute program, which is continuing, holds promise of lessening somewhat the critical shortage of trained reading specialists.

Thus, the fifth decade closed with recognition by the public and by the government that remedial reading is a necessary special service and that it should be staffed with properly trained teachers.

We have taken a birds-eye-view of five decades. The year 1916 marked the first publication on reading difficulties in America; 1965 ended with federal support for a vast program of new diagnostic and remedial services, and with support also for the training of needed personnel in this field. We have come far in these 50 years.

As the 50 years came to a close, however, much remained open and unsolved, and still is. We still do not have definitions of reading disability and remedial reading that everyone is willing to accept. Controversy continues over the causation of reading failure. Many varieties of remedial treatment are in use, some long

established, others very new. While reading clinics and remedial programs have proliferated, there is no set of standards as to how they should be organized, how they should operate, or how they should be staffed. Research is lagging far behind innovation, making it possible for the program with the best press agent to get the most attention. The many professions interested in reading problems are just beginning to pay attention to one another's findings and opinions.

There is, then, a great deal still to be accomplished. The work of predicting, preventing, diagnosing, and correcting reading failure has been well started. But final answers are a hope for the future rather than a present reality. Much remains to be done.

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